AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) ~~In a~~ A method of improving a transmission characteristic of an xDSL system that implements high-speed data communication over existing copper telephone line wires connecting a telephone office and a subscriber, comprising the steps of:

using a testing system installed in a telephone office proximate a main distribution frame polls, before connection of a subscriber telephone line to said xDSL system, said subscriber telephone line at an outside line of an xDSL circuit, to measure ~~measures~~ a cross-talk noise characteristic of said subscriber telephone line only within an xDSL transmission frequency band, and

~~prevents,~~ if said cross-talk noise characteristic is of high level, preventing said subscriber telephone line from being connected to said xDSL circuit,

wherein the measured cross-talk characteristic is cross-talk existing on the subscriber telephone line due to interference from other subscriber telephone lines within the xDSL transmission frequency band.

2. (currently amended) The method as claimed in claim 1, wherein said testing system transforms a level of cross-talk noise on the subscriber telephone line to noise spectrum data by FFT (Fast Fourier Transform) and compares said noise spectrum data with a template for noise level decision, which is weighted at a subject frequency, to thereby determine whether or not said subscriber telephone line is usable, only within a frequency band up to 1.1 MHz for Direct Multi-Tone xDSL use, said measurement of the cross-talk is made without injecting a test signal onto the subscriber telephone line under test.

3. (currently amended) A system for measuring a transmission characteristic of an xDSL system that implements high-speed data communication over existing copper telephone line wires connecting a telephone office and a subscriber, said system comprising:

polling means included in an outside telephone line of an xDSL circuit installed in an office for polling a subscriber telephone line;

noise level measuring means for measuring an existing level of cross-talk noise on the subscriber line limited to an xDSL transmission frequency band; and

decision means for determining, based on the level of cross-talk noise measured, whether or not the subscriber line is usable within the frequency range delimited by xDSL use.

4. (previously presented) The system as claimed in claim 3, wherein said polling means comprises:

an MDF (Main Distribution Frame) connected to terminals T and R of the outside line at a subscriber side; and

relays connected to said MDF and connecting the terminals T and R to test terminals.

5. (previously presented) The system as claimed in claim 4, wherein said noise level measuring means comprises:

a voltage measuring circuit for measuring an existing cross-talk noise voltage input via said relays;

an ADC (Analog-to-Digital Converter) circuit for converting cross-talk noise voltage measured to a digital signal; and

an FFT (Fast Fourier Transform) circuit for transforming the digital signal to noise spectrum data.

6. (currently amended) The system as claimed in claim 5, wherein said decision means comprises means for comparing the noise spectrum data with a template for noise level decision to thereby determining whether or not the subscriber line is usable within a frequency range up to 1.1 MHz for Direct Multi-Tone xDSL use.

7. (previously presented) The system as claimed in claim 3, wherein said noise level measuring means comprises:

a voltage measuring circuit for measuring an existing cross-talk noise voltage input via said relays;

an ADC (Analog-to-Digital Converter) circuit for converting cross-talk noise voltage measured to a digital signal; and

an FFT (Fast Fourier Transform) circuit for transforming the digital signal to noise spectrum data.

8. (currently amended) The system as claimed in claim 7, wherein said decision means comprises means for comparing the noise spectrum data with a template for noise level decision to thereby determining whether or not the subscriber line is usable within a frequency range up to 1 MHz for xDSL use.

9. (new) The system of claim 3, wherein, the noise level measuring means for measuring an existing level of cross-talk noise on the subscriber line operates only within 3 kHz and 3.2 MHz.

10. (new) The system of claim 3, wherein, the noise level measuring means for measuring an existing level of cross-talk noise on the subscriber line operates only up to 1.1 MHz.

11. (new) The system of claim 3, wherein, the noise level measuring means for measuring an existing level of cross-talk noise on the subscriber line operates only above POTS frequencies extending up to 3.2 MHz.

12. (new) The system of claim 3, wherein, the noise level measuring means for measuring an existing level of cross-talk noise on the subscriber line operates only above POTS frequencies extending up to 1.1 MHz.

13. (new) The system of claim 3, wherein, the noise level measuring means for measuring an existing level of cross-talk noise on the subscriber line operates only at frequencies extending up to 1.1 MHz.

14. (new) The method of claim 1, wherein the frequency band is within 3 kHz and 3.2 MHz and wherein the measured cross-talk characteristic is a cross-talk existing on the subscriber telephone line ascribable to interference from Integrated Services Digital Network.

15. (new) The method of claim 14, wherein the upper frequency of the frequency band is 1.1 MHz.

16. (new) The method of claim 1, wherein the upper frequency of the frequency band is 1.1 MHz.

17. (new) A system for measuring a transmission characteristic of an xDSL system that implements high-speed data communication over existing copper telephone line wires connecting a telephone office and a subscriber, said system comprising:

polling means included in an outside telephone line of an xDSL circuit installed in an office for polling a subscriber telephone line;

noise level measuring means for measuring an existing level of cross-talk noise on the subscriber line ascribable to first digital signal cross-talk noise within an overlapping frequency range of a first xDSL channel under test; and

decision means for determining, based on the level of cross-talk noise measured, whether or not the first xDSL channel under test on the subscriber line is usable, wherein,

said polling means comprises an MDF (Main Distribution Frame) connected to terminals T and R of the outside line at a subscriber side, and relays connected to said MDF and connecting the terminals T and R to test terminals, and

said noise level measuring means comprises a voltage measuring circuit for measuring an existing cross-talk noise voltage input via said relays, an ADC (Analog-to-Digital Converter) circuit for converting cross-talk noise voltage measured to a digital signal, and an FFT (Fast Fourier Transform) circuit for transforming the digital signal to noise spectrum data.

18. (new) The system of claim 17, wherein the first digital signal cross-talk noise is ascribable to an Integrated Service Digital Network signal.

19. (new) The system of claim 17, wherein the first digital signal cross-talk noise is ascribable at least a second xDSL channel.

20. (new) The system of claim 17, wherein,

the first digital signal cross-talk noise is ascribable to at least one of an Integrated Service Digital Network signal and a second xDSL channel, and

the noise level measuring means for measuring an existing level of cross-talk noise on the subscriber line operates only at frequencies extending up to 1.1 MHz.